

REMARKS

Claims 1 and 3-7 are pending. Claims 1 and 3-6 have been rejected as anticipated by Pinkerton, US Patent No. 5302874, newly cited. Claim 7 has been rejected as being obvious over Pinkerton in view of Koenig, US Patent No. 6250577. Applicant asserts that the claims are neither anticipated nor obvious. Furthermore, Applicant respectfully requests that the Final be withdrawn because Pinkerton could have been cited previously, the Applicant proceeded consistent with the suggestions of the examiner in the course of the interview of August 18, 2008 and Applicant has already filed a RCE and yet a further RCE will unnecessarily burden Applicant.

Applicant's invention, as set forth in claim 1, is:

A magnetic bearing element, comprising:

an annular permanent magnet divided in a circumferential direction thereof at at least one location to form a radially extending slit, the radially extending slit defined by opposing faces of the magnet; and
an annular binding band surrounding said annular permanent magnet,
wherein the opposing faces of the magnet are not in contact with each other.

Pinkerton does not teach such an invention. Contrary to the contention of the examiner, Pinkerton does not teach a binding band surrounding the annular permanent magnet as that term would be understood to those skilled in the art, particularly by those enlightened by Applicant's specification. Pinkerton discloses a "housing with a cylindrical body 12 and annular end walls 14 of non-magnetic material such as aluminum." See, col. 8, lns. 27-29. Pinkerton's "housing" is not a binding band. Rather, it is merely a container disposed about the assembly in order to

enclose it. That is why the housing has end walls. Indeed, because of the end walls and the metallic nature of its construction, Pinkerton's housing can perform no binding function. Further evidence that the housing 12 performs no "binding" function is due to the fact that the housing 12 is spaced from the magnets, as clearly shown in Fig. 7.

Applicant discloses that the binding band achieves a "preload" in order "to produce an immovable compressive contact between the enveloping surfaces of the individual permanent magnets". See original specification at pg. 2, lns. 25-26. The binding band has the functionality of "ensuring that annular magnets 2, 3, as well as annular magnet 2 and hub 1, are in contact against one another with an inwardly directed force." See original specification at pg. 3, lns. 13-15. One skilled in the art, based upon either the common understanding of the terms or after review of the specification, would understand that a binding band is a band that binds the individual magnets. No such teaching is provided by Pinkerton's housing, which is nothing more than an enclosure.

Support for Applicant's position is also seen in the drawing which illustrates binding band 5 mounted about and in contact with the outermost magnet 3. Because of the intimate contact between the binding band 5 and the magnets, the preload can be applied to the magnets. No preload can be achieved with Pinkerton's housing, at least in part due to its spacing from the magnets. Moreover, nothing in Pinkerton teaches that the housing 12 has the ability to preload the magnets.

Applicant is aware that limitations are to be given the broadest interpretation that is reasonable. Such an interpretation does not allow terms to be ignored, however. Applicant

claims a binding band, not a housing. Those skilled in the art would understand that a binding band is a band that binds. That interpretation is consistent with the originally filed disclosure and drawings. Pinkerton's housing 12 is not a band and it does not bind. Applicant discloses that his binding band "preloads" the magnets, a functionality not achievable with Pinkerton's metallic housing. While limitations are to be broadly interpreted, that interpretation must be reasonable in light of the art and the disclosure. The examiner's citation to Pinkerton's metallic housing as teaching a binding band ignores the "binding" that the band must achieve. The adjective "binding" cannot be ignored. Furthermore, the term band connotes a thin, compressive structure such as a rubber band. Pinkerton's housing 12, while possibly thin, has no ability to bind, compress or preload because it is metallic, is spaced from the magnets and has enclosing ends. Indeed, Pinkerton discloses "support pieces 30, 32 made of non-magnetic material such as aluminum" are positioned between the magnets and the housing 12 to serve as "support pieces". See, col. 8, lns. 42-45.

In view of the above, Applicant asserts that at least claim 1 is not anticipated by Pinkerton. Anticipation requires that a single reference teach each element of the claims in question. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as contained in the...claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). "The elements must be arranged as required by the claim..." *In re Bond*, 910 F.2d 831, 15 USPQ2d

1566 (Fed. Cir. 1990). Here, at least the binding band is not taught by Pinkerton, so it cannot anticipate.

With regard to Claim 6, the examiner again contends that it is anticipated by Pinkerton. Claim 6 is dependent upon Claim 5, which is itself dependent upon Claim 1. Claim 6 further specifies that there are a plurality of permanent magnets and that the slit of one magnet is offset from the slit of at least one other magnet. As illustrated in Applicant's Figure, the slits 4 of the magnet 3 are angularly offset from the slits 4 of the inner magnet 2. Pinkerton provides no such disclosure. Figure 7 of Pinkerton discloses that the radially extending gaps between the magnets 38, 40 are not offset. Rather, the space, otherwise undefined, extends as a straight line.

The examiner argues that "offset" as used in Claim 6 could mean "an agent, element, or thing that balances, counteracts, or compensates for something else". Applicant does not understand how the term offset could reasonably be given such an interpretation or how Pinkerton supports such an interpretation. Webster's defines "offset" when used with machines to mean "a jog or short displacement in an otherwise straight and continuous line, as in pipe, lever, rod, etc., made to avoid objects or to connect with other parts". Webster's definition is consistent with Applicant's disclosure and drawings but is not consistent with the examiner's application of Pinkerton. Nor is it consistent with the examiner's explanation of that term. One skilled in the art, based upon the common understanding of the term "offset" and/or enlightened by Applicant's disclosure, would not understand that Pinkerton discloses that the slits are offset.

Applicant therefore asserts that Claim 6 not only is not anticipated for the reasons Claim 1 is not anticipated but also for the reasons given here.

Claim 7 has been rejected as obvious over Pinkerton in view of Koenig, US Patent No. 6250577. The examiner acknowledges that Pinkerton fails to disclose a binding band of "carbon-fiber material" but points to Koenig for a teaching of same. The examiner cites to Col. 2, lns. 30-37 and Col. 3, lns. 6-12, neither of which support his combination. As made evident from Applicant's disclosure and drawing, the binding band surrounds the magnets in order to preload them. Koenig on the other hand discloses carbon-fiber "inserts" and not an exterior binding band. Figure 3 of Koenig discloses the inserts 36 as a series of spaced structures that form a race of a bearing. The spaced inserts 36 are not a band as that term would be understood and they do not have a binding functionality as claimed. In short, while Koenig discloses that carbon-fiber materials are known, Applicant is not claiming to have invented a carbon-fiber material. Rather, Claim 7 specifies that the "binding band" is made of carbon-fiber.

Furthermore, Pinkerton discloses that the housing 12 surrounds the magnets 38, 40 and encloses them. Modifying Pinkerton in view of Koenig would destroy Pinkerton's housing, because the inserts 36 of Koenig are spaced and extend only axially. They do not enclose anything as does the housing of Pinkerton. Hence, Applicant asserts that there is nothing in Pinkerton or Koenig that would lead one skilled in the art to modify Pinkerton in light of Koenig. If anything, the gaps between Koenig's inserts would teach away from the combination because the continuity of the housing would be lost. Hence, Applicant asserts that Claim 7 is not obvious.

In the event the examiner continues with the rejection, which Applicant asserts should be withdrawn, Applicant respectfully requests that the Final be withdrawn. Applicant does not

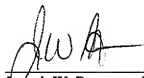
understand why only now Pinkerton has been cited. It could have been cited sooner and thus taken into account. Moreover, Applicant has already filed one RCE and has had an interview. Applicant has attempted diligently to advance the examination of the application and should not be burdened with a Final rejection after having proceeded in such fashion.

It is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, there being no other objections or rejections, this application is in condition for allowance, and a notice to this effect is earnestly solicited.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided below.

It is believed that no fee is due with this submission. If any further fees are required in connection with the filing of this amendment, please charge the same to out Deposit Account debit Account 50-0548.

Respectfully submitted,



Joseph W. Berenato, III
Registration No. 30,546
Attorney for Applicant

Berenato, White & Stavish, LLC
6550 Rock Spring Drive, Ste. 240
Bethesda, Maryland 20817
(301) 896-0600
Date: February 2, 2009